

CLAIMS

1. A security document, in particular a value-bearing paper, comprising at least one security element provided on a surface of the substrate forming the security document,

wherein to form the security element at least one surface region (2, 9, 10, 12, 15; 23, 24, 27, 30, 31, 33) of the security document is of a configuration and size specific to the respective security document in such a way and is spatially displaced, for example recessed or raised, at least relative to the surface (4) of the substrate (1) which is adjacent or surrounding the surface region, and/or is of such a different roughness, hardness, elasticity, slipperiness, thermal conductivity and/or stickiness, that the configuration and size of the surface region can be established as a consequence of the differing surface nature thereof by means of the human sense of touch, and

wherein the at least one surface region is formed by a film portion (2; 22) which is of a corresponding configuration and which is applied to the substrate (1) and which comprises a material different from the substrate (1) and which has openings (9, 10; 27) through which the surface (4) of the substrate (1) can be felt.

2. A security document as set forth in claim 1 characterised in that the substrate (1) and the film portion (2; 22) are formed by different kinds of film, which markedly differ in properties which can be detected by means of the human sense of touch.

3. A security document as set forth in claim 1 characterised in that the substrate (1) and the film portion (2; 22) are formed by papers with respective markedly different surface properties which can be determined by means of the human sense of touch.

4. A security document as set forth in claim 3 characterised in that the different surface properties of the papers are formed by corresponding printing.

5. A security document as set forth in claim 3 or claim 4 characterised in that the different surface properties of the papers are produced by region-wise mechanical processing of the papers, in particular by roughening, embossing and/or glazing.

6. A security document as set forth in one of the preceding claims characterised in that the security document has a plurality of surface regions (2, 11, 12, 15; 22, 29, 30, 31) which have different surface properties in relation to the substrate surface (4).

7. A security document as set forth in claim 6 characterised in that the surface regions (2, 11, 12, 15; 22, 29, 30, 31) involve a differing configuration, size and/or surface nature.

8. A security document as set forth in one of the preceding claims characterised in that the film (2) is three-dimensionally embossed at least in region-wise manner for producing a particular structure (6).

9. A security document as set forth in one of the preceding claims characterised in that the film (22) is provided in region-wise manner with a coating (29), for example printing thereon, which produces a special surface nature which can be felt.

10. A security document, in particular a value-bearing paper, comprising at least one window-like opening in the substrate of the security document, said opening forming at least part of a security element, wherein the window-like opening (23, 24) is of a configuration and size specific to the respective security document and is so adapted that the configuration and size of the opening (23, 24) can be determined by means

of the human sense of touch, and wherein the opening (23, 24) is covered by a film (22) fixed on a surface of the substrate,

characterised in that

the film has a surface nature which is markedly different from the surface nature of the substrate (1) in a manner which can be determined by means of the human sense of touch, insofar as it is provided that

a) the film (22) projects beyond the opening (23, 24) of the substrate (1) and in its projecting region is provided with at least one aperture (27) through which the surface (4) of the substrate (1) can be felt and/or

b) the film (2) is three-dimensionally embossed at least region-wise to produce a particular structure (6),

and/or

c) the film (22) is provided in region-wise manner with a coating (29), for example printing thereon, which produces a special surface nature which can be felt,

and/or

d) the film (22) is provided at least in its region covering the opening (24) with a perforation (22) in the form of a pattern which can be easily felt.

11. A security document as set forth in claim 10 characterised in that the security document has a plurality of window-like openings (23, 24) which can be felt in respect of size and configuration by means of the human sense of touch.

12. A security document as set forth in claim 11 characterised in that the openings (23, 24) are of differing configuration and/or size and/or are covered with a film (22) having different properties.

13. A security document as set forth in one of the preceding claims characterised in that the edge (7, 8) of the at least one surface region (2,

11, 13, 15; 22, 23, 24, 27, 30, 31, 33) is in the configuration of a simple geometrical figure.

14. A security document as set forth in claim 13 characterised in that the at least one surface region (2, 13, 22) is in the form of an elongate rectangle, in particular of a strip shape.

15. A security document as set forth in one of the preceding claims characterised in that at least in the at least one surface region (15, 33) the substrate (1) is deformed by embossing to provide forwardly curved portions on a surface (4) of the substrate (1) and corresponding recesses (17, 34) on the other surface (16) of the substrate (1).

16. A security document as set forth in one of the preceding claims characterised in that the substrate (1) has at least one surface region (2, 11, 12, 15; 22, 27, 29, 30, 31, 33) of a surface nature which differs in relation to the surrounding surface (4, 2, 22) of the substrate (1), and at least one opening (23, 24).

17. A security document as set forth in one of the preceding claims characterised in that it is provided with at least one further security element (19, 35) which can be checked optically or by machine.

18. A security document as set forth in claim 17 characterised in that the security element (35) which can be checked optically or by machine overlaps at least region-wise with the at least one surface region (22) of the surface nature which differs in relation to the surrounding surface (4) of the substrate (1), and/or the opening (23, 24).

19. A security document as set forth in claim 17 or claim 18 characterised in that the security element (19, 35) which can be optically checked is formed by a pattern comprising diffraction structures (36), for example a hologram, and/or a region-wise metallisation.